



May 28, 1993

Mr. Ruben McCullers  
Work Assignment Manager  
U.S. Environmental Protection Agency  
726 Minnesota Avenue  
Kansas City, KS 66101

Subject: Review Comments on the Environmental Audit Plan for Knapheide Mfg. Co.  
West Quincy, Missouri  
Contract No. 68-W9-0006; Work Assignment No. R07068

Dear Mr. McCullers:

PRC Environmental Management, Inc. (PRC), is submitting review comments on the Environmental Audit Plan (plan) for Knapheide Mfg. Co. (Knapheide). The plan was prepared for Knapheide by the McLaren/Hart Environmental Engineering Corporation and is dated May 7, 1993. PRC received the plan for review on May 14, 1993.

The plan was reviewed for consistency with the Consent Agreement/Consent Order (CA/CO) dated March 4, 1993, and the guidance documents referenced within the order.

PRC found that the plan contained all of the elements required by the CA/CO, but lacks the detail required to determine whether the environmental audit will successfully accomplish the goals described in the CA/CO and guidance documents. PRC also found that some of Knapheide's proposed audit activities may not be eligible for offset of penalties. The comments prepared by PRC outline those areas that require additional explanation and notes those activities which may not be eligible for offset of penalties. PRC suggests that Knapheide address the enclosed comments and submit a revised environmental audit plan before the audit is approved and conducted.

PRC formed its comments and recommendations as requested so that they can easily be modified and sent to the facility. If you have any questions or comments, please call me at (913) 281-2277.

Sincerely,

Nathan Meyer  
Environmental Scientist

Enclosure (hard copy and disk copy)

cc: Aaron Zimmerman, U.S. EPA-RPO (letter only)  
Paula Hirtz, PRC (letter only)



R00000382  
RCRA Records Center

**TECHNICAL REVIEW COMMENTS  
ON THE  
ENVIRONMENTAL AUDIT PLAN  
Knapheide Mfg. Company  
West Quincy, Missouri  
May 7, 1993**

**INTRODUCTION**

PRC Environmental Management, Inc. (PRC), reviewed the Environmental Audit Plan (plan) for consistency with the Consent Agreement/Consent Order (CA/CO) dated March 4, 1993, and the guidance documents referenced within the order. Specific guidance documents used for this review include EPA's February 12, 1991 "Policy on the Use of Supplemental Enforcement Projects in EPA Settlement Agreements," EPA's "Environmental Auditing Policy Statement" (51 Federal Register 25004, July 9, 1986), and the "National Enforcement Investigations Center Multi-Media Investigation Manual," dated March 1992. PRC's comments are organized under general and specific headings.

**GENERAL COMMENTS**

PRC found that the plan contains all the elements required on page 7 of the CA/CO. These elements include (1) a statement of the qualifications for the project officer of the environmental audit; (2) a cost estimate and budget for the plan, environmental audit, and Environmental Audit Report (report); (3) a schedule for the performance of the environmental audit; and (4) the procedures that will be followed during the audit and development of the report.

PRC found that the qualifications of the project officer, as well as the entire audit team, are acceptable for this type of environmental work. PRC found that the cost estimate and budget are reasonable, although each requires additional explanation of who will conduct the field screening activities and which costs are included in the analytical costs. PRC found that the schedule for the performance of the audit is within the timeframe specified the CA/CO. PRC found that the procedures to be followed during the audit and development of the report require additional explanation and greater detail to assess whether they will successfully achieve the goals described in the CA/CO and the guidance documents. Additional explanation and detail also are needed to assess whether specific activities will be eligible for offset of penalties.

The following specific comments outline the additional information that must be included in a revised environmental audit plan (revised plan) before approval can be granted.

**SPECIFIC COMMENTS**

**1. Section 4.0, Page 4-1, Records Documentation Review.**

This section states that the audit team will review facility records and documents for adherence to compliance requirements and performance with those requirements. The audit team must obtain copies of all facility records or documents that indicate potential violations or environmental concerns

and include this documentation in the appendixes of the report. In addition, the report must contain a list of all facility records or documents reviewed. Any records or documents that do not contain information regarding a potential violation or environmental concern must be available for review at the facility should the need arise.

**2. Section 4.0, Page 4-1, Detailed Facility Inspections.**

This section states that the audit team will inspect all appropriate facilities, equipment, and operations for compliance with applicable federal, state, and local regulations. The audit team must photograph any portion of the facility, and any equipment or operations, which may present potential violations or environmental concerns. In addition, the audit team must inspect the equipment and operations to identify opportunities to minimize waste or prevent pollution.

**3. Section 4.0, Pages 4-4 through 4-7, Compliance Status Assessment.**

This section describes the sampling activities that will be conducted at solid waste management units (SWMU) at the facility. The revised plan must contain a facility map showing the SWMUs and proposed sample locations.

In addition, the following activities must be conducted during all sampling activities:

- The audit team must photograph all SWMUs and include the photographs in the report.
- The audit team must examine the areas surrounding the SWMUs for signs of potential release.
- The audit team must photograph any visible signs of release.
- The audit team must document sample collection procedures, including sample number, location, depth, and method of collection in a bound field logbook.
- The audit team must collect duplicate samples (split samples) at a frequency of at least 10 percent for each media type (e.g., soil, water, air) to assess the precision of the formal analytical laboratory used by the facility.
- The audit team must follow standard sample chain-of-custody procedures.

**4. Section 4.0, Page 4-4, Wood Treatment Areas.**

This section describes the sampling activities that will be conducted in Knapheide's wood treatment areas. The revised plan must state that the following information will be obtained during the audit and presented in the report: (1) the period of operation for each wood treatment area; (2) the specific activity that was conducted in each area (e.g., application, drying); and (3) whether preservatives other than pentachlorophenol, such as creosote, were used in the wood treatment areas. Depending on the period of operation, the activity conducted, and the type of preservative used, the area(s) may be subject to the drip pad requirements of 40 Code of Federal Regulations (CFR)

Part 265 Subpart W. The report must discuss if these requirements apply to Knapheide's wood treatment areas.

Note that EPA will not accept for offset of penalties, the cost incurred for any activity required to comply with environmental regulations. The maintenance of minimum compliance requirements is not one of the five categories of supplemental environmental projects (SEP) as found on pages 2 through 4 of EPA's "Policy on the Use of Supplemental Enforcement Projects in EPA Settlements," February 12, 1991.

**5. Section 4.0, Pages 4-4 and 4-5, Potential Fuel Spill Area/Former Underground Tank Areas.**

This section describes the sampling and analysis that will be conducted in these two areas of documented groundwater contamination. Knapheide should note that EPA will not accept for offset of penalties, the costs incurred for any activity conducted at these two areas that is being required by the Missouri Department of Natural Resources (MDNR). The conductance of activities required by another government agency is not one of the five categories of SEPs (EPA 1991).

In order to verify that activities proposed in the audit are not required by MDNR, Knapheide must provide EPA with copies of all investigations conducted in these two areas, as well as any correspondence between Knapheide and MDNR that discuss the scope of the required work. This documentation should be sent to EPA when the revised plan is submitted.

PRC is concerned that the field screening proposed for the two documented areas of groundwater contamination will duplicate work previously conducted. The collection of groundwater samples from the 14 existing monitoring wells also may duplicate previous work (or be required by MDNR). For the costs incurred for sampling and analysis of the 14 existing wells to be considered for offset of penalties, the revised plan must explain why the selected analysis will provide new information that has not been obtained through previous sampling and analysis (or sampling and analysis that is required by MDNR).

PRC also is concerned that the investigation of the two documented areas of groundwater contamination will become the focus of the environmental audit. The first complete sentence on page 4-5 states that McLaren/Hart estimates that the performance of the field screening in these two areas will require two days of sampling and analysis. On page 7-1 (Cost Estimate/Budget), the plan states that two McLaren/Hart staff will be on site for only three or four days to conduct the audit. It appears that one-half to two-thirds of the audit will be spent on activities that may not be eligible for offset of penalties (also see specific comment 15).

**6. Section 4.0, Page 4-5, Fire Pond.**

This section describes the sampling activities that will be conducted at the fire pond. PRC does not recommend compositing the grab samples from the bottom of the overflow area for volatile organic analysis (VOA). The homogenization of the grab samples will most likely drive the volatile organic compounds (VOC) from the composite sample. PRC recommends that the samples to be submitted for VOA be collected from the lowest point in the overflow area. It is acceptable, however, to composite grab samples for the analysis of metals and base neutral acids.

The revised plan must state the purpose of collecting and analyzing wastewater samples entering the fire pond. If the purpose is to make a hazardous waste determination, the cost of analyzing these samples will not be eligible for offset of penalties as this is a minimum compliance requirement of 40 CFR Part 262. Note that if any of the wastewater samples are hazardous, the fire pond could be a regulated surface impoundment subject to the regulations of 40 CFR Part 265.

In addition, if the fire pond discharges to a nearby ditch, it may be subject to National Pollutant Discharge Elimination System (NPDES) monitoring requirements of 40 CFR Part 122. The report must discuss the applicability of the NPDES requirements for the fire pond.

**7. Section 4.0, Page 4-6, Aboveground Storage Tank Areas.**

This section describes the sampling activities that will be conducted around the aboveground storage tank areas. The revised plan must state that the following information will be obtained during the audit and presented in the report: (1) the size of the tanks; (2) the age of the tanks; (3) the types of product or waste that have been stored in these tanks; and (4) the dates in which each product or waste was stored. Note that if the tanks are required to have secondary containment by the Spill Prevention Control and Countermeasures System (SPCC) requirements of 40 CFR Part 112, the costs for constructing secondary containment will not be a SEP, and therefore will not be eligible for offset of penalties.

In addition, the analyses selected for the samples must be able to detect the product or waste that was stored in the tanks. For example, if the tanks stored diesel fuel, the samples should be analyzed for total petroleum hydrocarbons (TPH) as diesel fuel. The audit team also must collect a groundwater sample if detectable subsurface soil contamination, as discovered by field screening, exists near the groundwater surface.

**8. Section 4.0, Page 4-6, Stormwater Ditches.**

This section describes the sampling activities that will be conducted in the stormwater ditches at the facility. First, the revised plan must identify the stormwater ditches on the facility map. Second, the report must discuss whether Knapheide has a NPDES stormwater permit, or whether it is required. Again, the activities required to obtain a permit are not SEPs and are not eligible for offset of penalties.

A single grab soil sample must be collected and analyzed for VOCs, base neutral acids, and metals in each ditch in the area exhibiting the highest potential for contamination (e.g., below outfalls or roof drains) and in the areas where the ditch leaves the facility property. Composite samples may be used for other areas of the ditch. PRC does not recommend compositing the grab samples for VOA (see specific comment 6).

**9. Section 4.0, Page 4-6, Drum Storage Area.**

This section describes the sampling activities that will be conducted in the drum storage area. The revised plan must state that the following information will be obtained during the audit and presented in the report: (1) the type(s) of product or waste that was previously stored in the empty drums;

(2) the type(s) of product or waste stored in the partially empty drums; (3) whether any wastes were hazardous; and the (4) the dates in which any hazardous waste was stored in the area. The report also must discuss if the drum storage area is subject to the requirements of 40 CFR Part 264 or 265.

In addition, the audit team must ensure that the selected analyses are able to detect the constituents contained the drums.

**10. Section 4.0, Pages 4-6 and 4-7, Waste Storage Building.**

This section describes the sampling activities that will be conducted in and around the waste storage building. The revised plan must state that the following information will be obtained during the audit and presented in the report: (1) the type of waste that was stored in building; (2) whether the waste was a hazardous waste; and (3) the dates in which the waste storage building was used to store hazardous waste, if any. The report must also discuss if the drum storage area is subject to the requirements of 40 CFR Part 264 or 265.

**11. Section 4.0, Page 4-7, Sandblasting Area.**

This section describes the sampling activities that will be conducted in and around the sandblasting area. The third sentence in this section states that "samples have been collected and analyzed for the sandblasting area." It is not clear if the samples that were collected and analyzed were waste samples or soil samples. Clarify this in the revised plan. To comply with the requirements of 40 CFR Part 262, Knapheide must sample and analyze the waste sand (although not a SEP and not eligible for offset of penalties). If not already done, PRC suggests that Knapheide sample the waste sand during the audit and analyze it for toxicity characteristic leaching procedure (TCLP) metals and VOCs and submit the results with the report. If the analysis was done, include a copy of the results with the report. If the waste sand is hazardous, the report must discuss if the sandblasting area is subject to requirements of 40 CFR Part 264 or 265.

**12. Section 4.0, Page 4-7, Paint Hook Cleaning Area.**

This section describes the sampling activities that will be conducted in the paint hook cleaning area. The first sentence of this section states that the paint hooks are cleaned in the sandblasting area while the second sentence states that surface soil samples will be collected in this area in the same manner as described for the sandblasting area. It is not clear whether the sandblasting area and paint hook cleaning area are the same or not. Clarify the physical relationship of the these two areas in the revised plan and identify these areas on the map.

In addition, to comply with the requirements of 40 CFR Part 262, Knapheide must conduct a waste determination of the waste paint residue from the removal of paint using a blow torch (although not a SEP). If not already done, PRC suggests that Knapheide sample the waste paint residue during the audit and analyze it for TCLP metals and semivolatiles and submit the results with the report. If it has been done, include a copy of the results with the report. If the waste paint residue is hazardous, the report must discuss if the sandblasting area is subject to the requirements of 40 CFR Part 264 or 265.

**13. Section 4.0, Page 4-7, Air Emission Sources.**

This section describes the air sampling that will be conducted at the facility. The audit team must determine if the collection of the two ambient air samples inside the building in the areas of the paint booths and the dip tanks is required under the Occupational Safety and Health Act (OSHA). The audit team also must determine if the air sampling at the filter outlets is required by MDNR to obtain air permits. If either of these two activities are required, they are not SEPs and the cost of analyzing these samples will not be eligible for offset of penalties.

**14. Section 4.0, Page 4-7, Interviews.**

This section describes the interviews that will be conducted as part of the environmental audit. The revised plan must include:

- The approximate number of interviews that will be conducted.
- When the interviews will be conducted. PRC recommends that the interviews be conducted before the sampling activities. Experience has shown that information obtained during interviews can be helpful in identifying potential spill or disposal areas.
- The position titles for those individuals to be interviewed. PRC recommends that the audit team interview employees who have conducted paint stripping and painting operations, as well as those who have conducted maintenance activities. PRC also recommends that long-term employees of this Knapheide facility be interviewed.
- How the interviews will be recorded (e.g., tape recorded, notation).
- In what form the information obtained during the interview will be presented in the report. PRC recommends that a written summary of each interview be prepared and that these summaries be included in the appendixes of the report. It is best to prepare the summaries as soon as possible after the interview.

**15. Section 7.0, Page 7-1, Cost Estimate/Budget.**

This section provides a cost estimate for the plan, environmental audit, and report. The estimate states that the costs for the audit include two McLaren/Hart staff members on site for three to four days. The revised plan must explain whether these two individuals will be operating the Geoprobe® and conducting the field screening for the investigation of the potential fuel spill area/former underground tank areas (page 4-4). If these individuals are conducting this work, PRC is concerned that the focus of the audit will be on the investigation of these two areas. As mentioned in specific comment 5, the costs incurred for MDNR-required or duplicate work are not SEPs and will not be eligible for offset of penalties.

Knapheide and McLaren/Hart must ensure that the other activities proposed for this audit, such as review of facility records and documents and interviews with employees, will receive adequate time and consideration. This section must include an estimate of the percentage of person-hours that will

be used for the following general audit activities: review of facility records and documents, interviews, and sampling.

The costs of the environmental audit include analytical costs of \$55,170. The revised plan must explain exactly what these costs include. It is not clear if these costs include field screening (rental of the Geoprobe® and mobile laboratory) or off-site analysis only. If the two primary McLaren/Hart audit staff members will not be operating the Geoprobe® and conducting the field screening, break out the time and costs of the other McLaren/Hart personnel or subcontractors that will be conducting this task.

Note that the costs incurred for specific audit activities must be carefully documented for inclusion in the quarterly financial reports. Knapheide must carefully track the hours spent on any activities, including the investigation of the two documented areas of groundwater contamination, that EPA has noted are not SEPs and will not be eligible for offset of penalties.